Predictors of Recommended Academic Accommodations Among Concussed Student-Athletes Presenting to the Primary Care Setting:
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PURPOSE: To describe academic accommodations primary care sports medicine physicians recommend to adolescents presenting with sports-related concussion and to identify clinical predictors of accommodations.

METHODS: This analysis was nested in a prospective cohort study of concussed student-athletes presenting to a primary care sports medicine clinic for initial evaluation. Enrolled patients (8-18 years old) were injured during organized or recreational sport, presented within 3 days of injury, and consented to participate. A standardized form including academic accommodations, return to sport guidelines, therapy prescriptions, and referrals was completed by the provider at the initial visit. Patients with no recommendation form were excluded. Recommendations were grouped into 2 academic accommodation categories: 1) cognitive (e.g., limited or no testing, extra time for schoolwork), and 2) visual-vestibular (e.g., auditory participation only, limit visual stimuli). Symptom scores, average visual near-point convergence, and ImPACT composite percentiles (visual memory, verbal memory, reaction time and processing speed) were included in a multivariable backwards selection regression model to predict accommodations.

RESULTS: 110 patients met the inclusion criteria (mean age=14.3±2.1 years; 57 males, 52%). Most patients received instruction for academic accommodations (N=95; 86%). The most common recommendations were: “Take rest breaks during the day as needed” (N=75, 68%), “Allow extra time to complete tasks” (N=69, 63%), and “Patient is to limit visual stimulants and screen time” (N=69, 63%). 84 patients (76%) received cognitive accommodations, 80 (73%) visual-vestibular, and 69 (63%) both. Patients with lower visual memory percentile were more likely to receive cognitive accommodations (β=-0.0175; p=0.03). Patients with higher symptom score (β=0.0372; p=0.01) and lower processing speed percentile (β=0.0223; p=0.01) were more likely to receive visual-vestibular accommodations.

CONCLUSIONS: Most student-athletes received recommendations for accommodations. Symptom and neurocognitive measures may aid clinicians in decision-making about recommended academic accommodations.

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